Table 1.3 Renewable Energy Consumption for Electricity Generation by Energy Use Sector and Energy Source, 2004 - 2008
(Quadrillion Btu)

Sector and Source	2004	2005	2006	2007	2008
Total	3.723	3.781	4.035	3.699	3.986
Biomass	0.574	0.585	0.591	0.598	0.606
Waste	0.230	0.230	0.241	0.245	0.267
Landfill Gas	0.069	0.068	0.076	0.080	0.094
MSW Biogenic[1]	0.142	0.144	0.147	0.146	0.148
Other Biomass[2]	0.019	0.018	0.018	0.019	0.024
Wood and Derived Fuels[3]	0.344	0.355	0.350	0.353	0.339
Geothermal	0.311	0.309	0.306	0.308	0.314
Hydroelectric Conventional	2.690	2.703	2.869	2.446	2.512
Solar Thermal/PV	0.006	0.006	0.005	0.006	0.009
Wind	0.142	0.178	0.264	0.341	0.546
Commercial	0.021	0.021	0.022	0.020	0.021
Biomass	0.019	0.020	0.021	0.020	0.021
Waste	0.019	0.020	0.021	0.019	0.020
Landfill Gas	0.002	0.002	0.003	0.002	0.003
MSW Biogenic[1]	0.013	0.013	0.013	0.013	0.014
Other Biomass[2]	0.004	0.005	0.004	0.004	0.004
Wood and Derived Fuels	*	*	*	*	*
Geothermal	-	-	-	-	-
Hydroelectric Conventional	0.001	0.001	0.001	0.001	0.001
Solar Thermal/PV	-	-	-	-	*
Wind	-	-	-	-	-
Industrial	0.231	0.226	0.219	0.208	0.200
Biomass	0.199	0.194	0.190	0.193	0.184
Waste	0.005	0.005	0.003	0.004	0.005
Landfill Gas	0.001	0.001	*	*	*
MSW Biogenic[1]	*	*	*	0.001	-
Other Biomass[2]	0.004	0.003	0.003	0.003	0.004
Wood and Derived Fuels[3]	0.194	0.189	0.187	0.188	0.179
Geothermal	-	-	-	-	-
Hydroelectric Conventional	0.033	0.032	0.029	0.016	0.017
Solar Thermal/PV	-	-	-	-	-
Wind	-	-	-	-	-
Electric Power[4]	3.471	3.534	3.794	3.470	3.764
Biomass	0.356	0.371	0.379	0.386	0.401
Waste	0.206	0.205	0.216	0.221	0.242
Landfill Gas	0.066	0.064	0.072	0.077	0.091
MSW Biogenic[1]	0.129	0.131	0.134	0.132	0.135
Other Biomass[2]	0.011	0.010	0.010	0.012	0.016
Wood and Derived Fuels[3]	0.150	0.166	0.163	0.165	0.159
Geothermal	0.311	0.309	0.306	0.308	0.314
Hydroelectric Conventional	2.656	2.670	2.839	2.430	2.495
Solar Thermal/PV	0.006	0.006	0.005	0.006	0.009
Wind	0.142	0.178	0.264	0.341	0.546

[1]Includes paper and paper board, wood, food, leather, textiles and yard trimmings.
[2]Agriculture byproducts/crops, sludge waste, and other biomass solids, liquids and gases.
[3]Black liquor, and wood/wood waste solids and liquids.
[4]The electric power sector comprises electricity-only and combined-heat-power (CHP) plants within North American Classification System (NAICS) 22 category whose primary business is to sell electricity, or electricity and heat, to the public.
MSW = Municipal Solid Waste.
PV = Photovoltaic.
* = Less than 500 billion Btu.
- = No data reported.
Notes: Totals may not equal sum of components due to independent rounding. Starting with 2004 EIA adopted a new method of allocating fuel consumption between electric power generation and useful thermal out put (UTO) for combined heat and power (CHP) plants. The new method proportionately distributes a CHP plant`s losses between the two output products (electric power and UTO) assuming the same efficiency for production of electricity as UTO. Energy consumption for the noncombustible renewable energy sources (hydroelectric conventional, solar thermal, PV and wind) used in electricity generation is determined by mulitiplying generation times the fossil fuel equivalent heat rate. Energy consumption for geothermal energy used in electricity generation is determined by mulitiplying generation times the geothermal heat rate. See EIA, Annual Energy Review (AER) 2008, DOE/EIA-0384 (2008) (Washington, DC, June 2009), Table A6.
Data revisions are discussed in the Highlights section.
Sources: Analysis conducted by U.S. Energy Information Administration, Office of Coal, Nuclear, Electric and Alternate Fuels and the following specific sources:
U.S. Energy Information Administration, Form EIA-923, "Power Plant Operations Report," and predecessor forms: Form EIA-906, "Power Plant Report," and Form EIA-920, "Combined Heat and Power Plant Report."